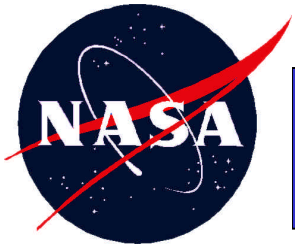


KSC Spaceport Services Safety, Occupational Health, and Environment Division



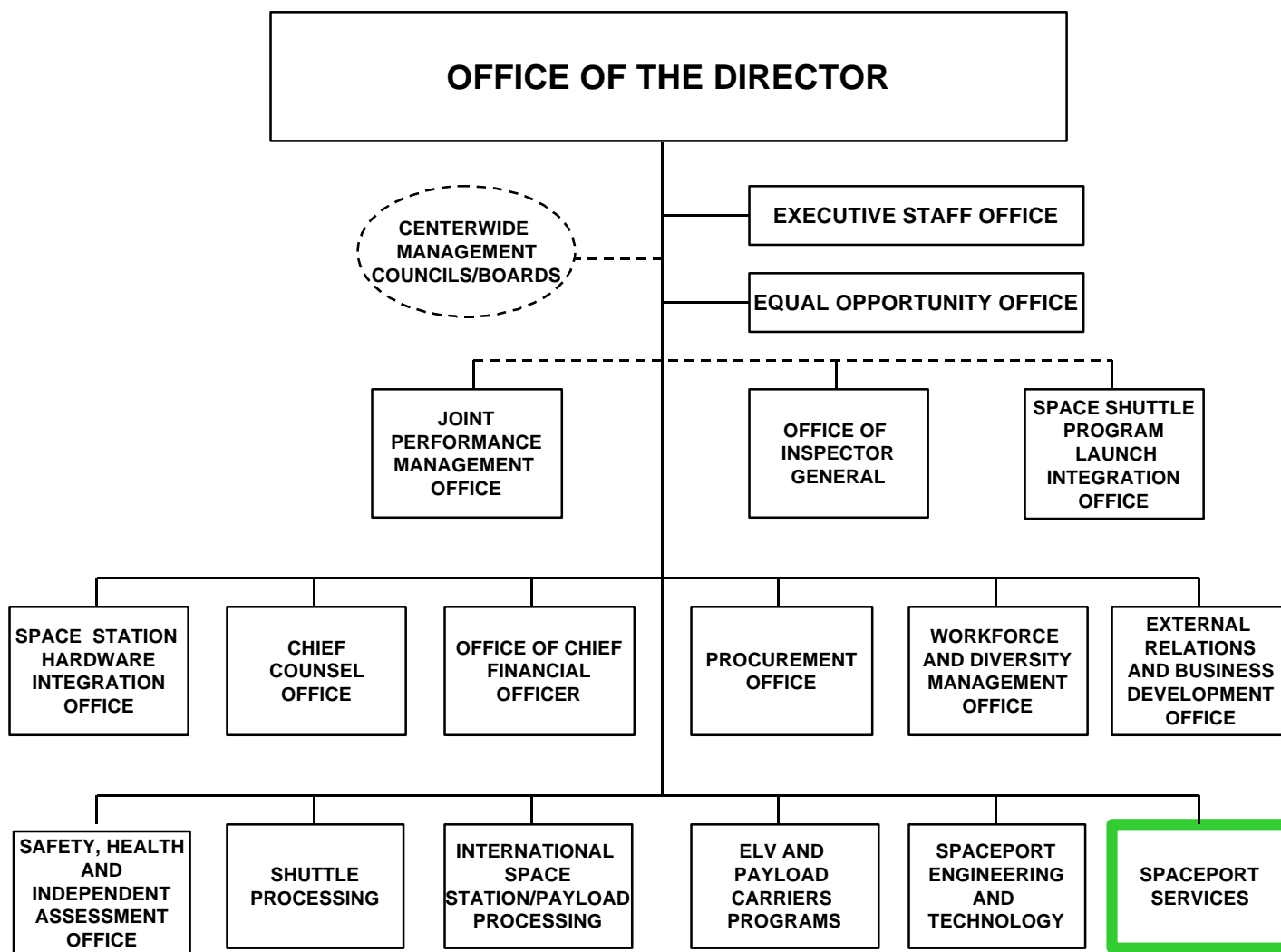


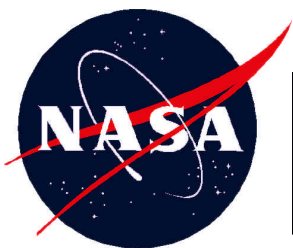
**KSC Spaceport Services
Safety, Occupational Health, and Environment Division**

Institutional Safety and Quality Incidents & New Initiatives

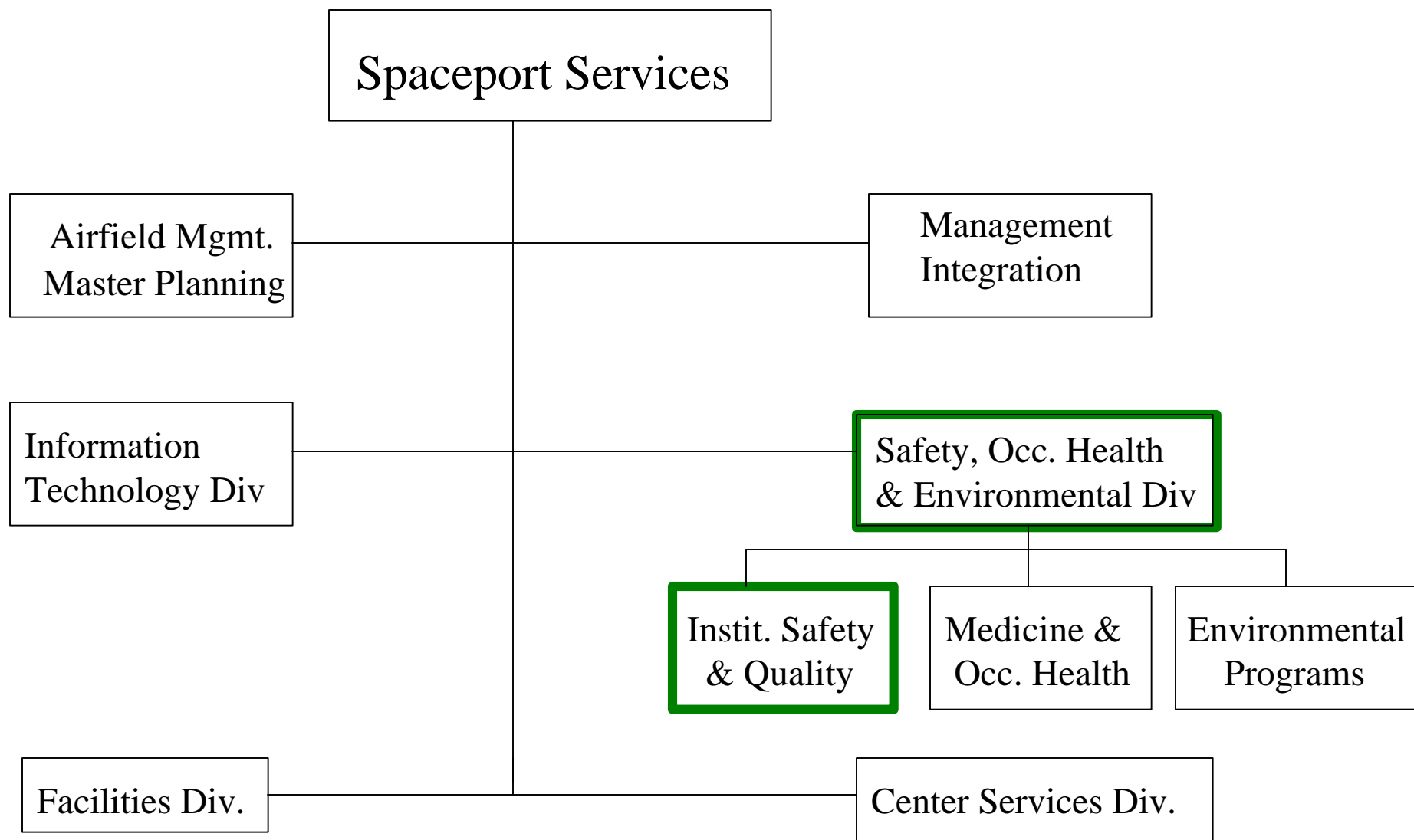
NASA Safety Managers Meeting

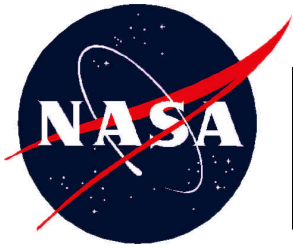
3/20/2001





KSC Spaceport Services Safety, Occupational Health, and Environment Division



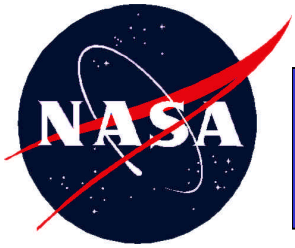


**KSC Spaceport Services
Safety, Occupational Health, and Environment Division**

Institutional Safety and Quality Branch – Resources

14 FTE Civil Service

Pressure Vessel/System Certification	2 FTE
Explosives Safety Program Management	1 FTE
Facility Assurance/System Safety	3 FTE
Occupational Safety Specialists	3 FTE
VPP Program Lead	1 FTE
Database Management	2 FTE
Propellant Contracts Quality Assurance	1 FTE
Branch Management	1 FTE



KSC Spaceport Services Safety, Occupational Health, and Environment Division

KSC Reorganization May 2000 - Benefits:

S/H/E under one organization at KSC

Synergy between Divisions within the Directorate

Facilities

Logistics

Security/Fire/EP

Information Technology

Airfield Mgmt.

Master Planning

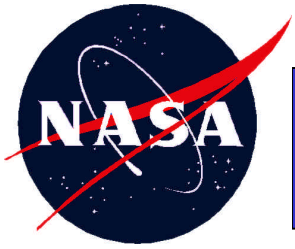
POC for safety on all institutional contracts

Base Ops Contract

Park Services

Food Services

Gov. Construction



KSC Spaceport Services Safety, Occupational Health, and Environment Division

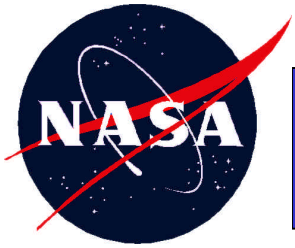
KSC Reorganization May 2000 - Issues in work

Communications between 6 different S&MA Offices

Finalize the selection of the best home for each piece of the safety program

Finalize distribution of contract safety insight responsibility

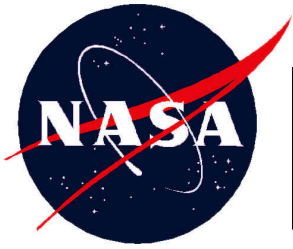
Re-write to large block of safety policy, procedures and guidelines to reflect current organization



KSC Spaceport Services Safety, Occupational Health, and Environment Division

VPP Program Status

Optimistic application date	April 1, 2002
Formal kick-off for NASA VPP	December 15, 2000
Formed teams for each VPP element	January 17, 2001
VPP Leadership team (NASA & Contr.)	Twice/month
OSHA on-site fact finding for USA and SGS applications	February 2001



**KSC Spaceport Services
Safety, Occupational Health, and Environment Division**

Other Significant Areas of Emphasis in Institutional Safety

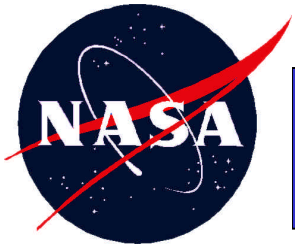
Facility Assurance process definition for JBOSC

Public event safety (including 20,000 visitors per launch)

Variance Processing Automation/Database

Explosives Safety Committee including contractors

PEP re-survey May 2001



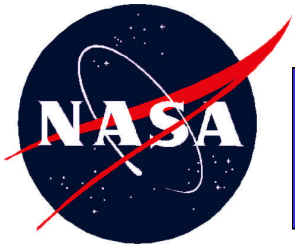
**KSC Spaceport Services
Safety, Occupational Health, and Environment Division**

Other Significant Areas of Emphasis in Institutional Safety

Facility inspection program upgrade

Safety Concerns and Reporting System (MSFC)

Training needs assessment/survey (Ames)



KSC Spaceport Services Safety, Occupational Health, and Environment Division

Areas Where Code QS Assistance may be Feasible

Web Base IRIS

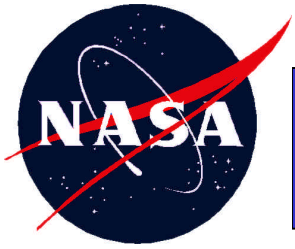
38 system users at KSC = extensive care and feeding

Maximize Ease of Use = better/more comprehensive use

QD Sitting Program

Automate the updating process with addition of new programs

Mishap Report Distribution/Database



**KSC Spaceport Services
Safety, Occupational Health, and Environment Division**

Areas Where Code QS Assistance may be Feasible

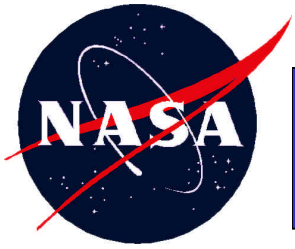
Repository/web for Center Program Information

Facilitation of Program Specific Discussions (similar to Lifting Devices, fire protection and emergency preparedness)

VPP status and approach

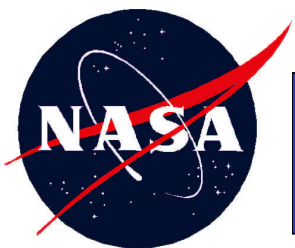
Performance based contract insight

Help to place the right perspective on the injury/illness data presented to Senior Management



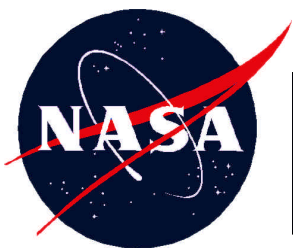
**KSC Spaceport Services
Safety, Occupational Health, and Environment Division**

Safety Incidents/Mishaps at KSC
FY 00 and 01



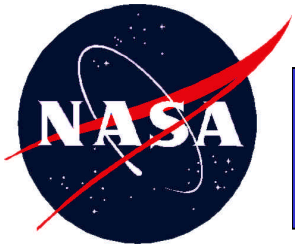
KSC Spaceport Services Safety, Occupational Health, and Environment Division





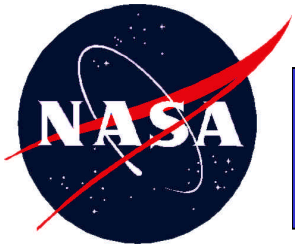
KSC Spaceport Services Safety, Occupational Health, and Environment Division





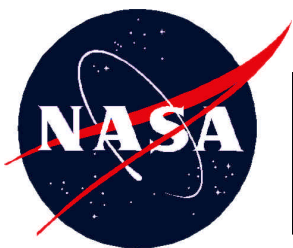
KSC Spaceport Services Safety, Occupational Health, and Environment Division





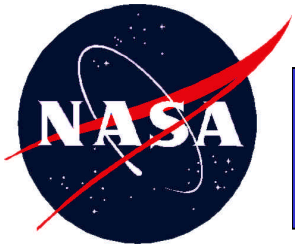
KSC Spaceport Services Safety, Occupational Health, and Environment Division





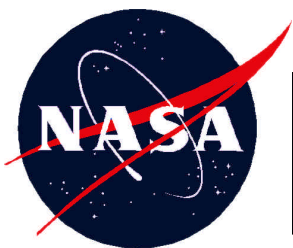
KSC Spaceport Services Safety, Occupational Health, and Environment Division





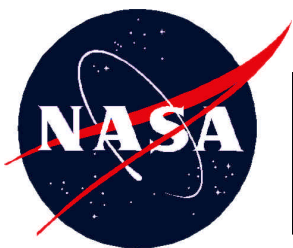
KSC Spaceport Services Safety, Occupational Health, and Environment Division





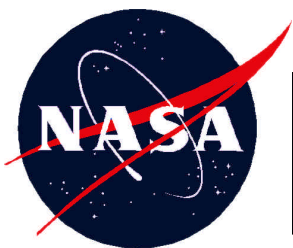
KSC Spaceport Services Safety, Occupational Health, and Environment Division





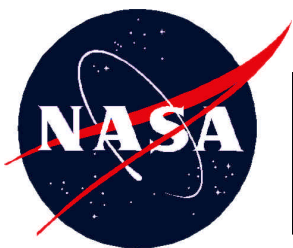
KSC Spaceport Services Safety, Occupational Health, and Environment Division





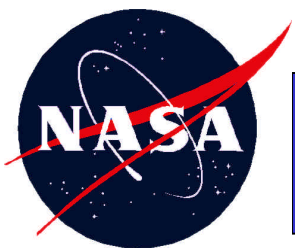
KSC Spaceport Services Safety, Occupational Health, and Environment Division





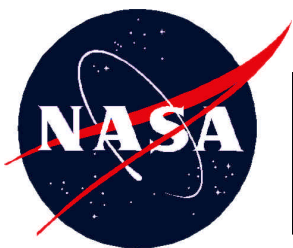
KSC Spaceport Services Safety, Occupational Health, and Environment Division





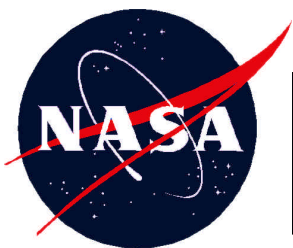
KSC Spaceport Services Safety, Occupational Health, and Environment Division





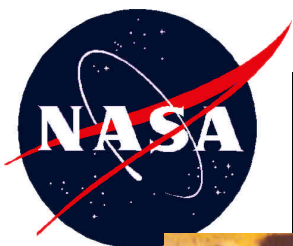
KSC Spaceport Services Safety, Occupational Health, and Environment Division



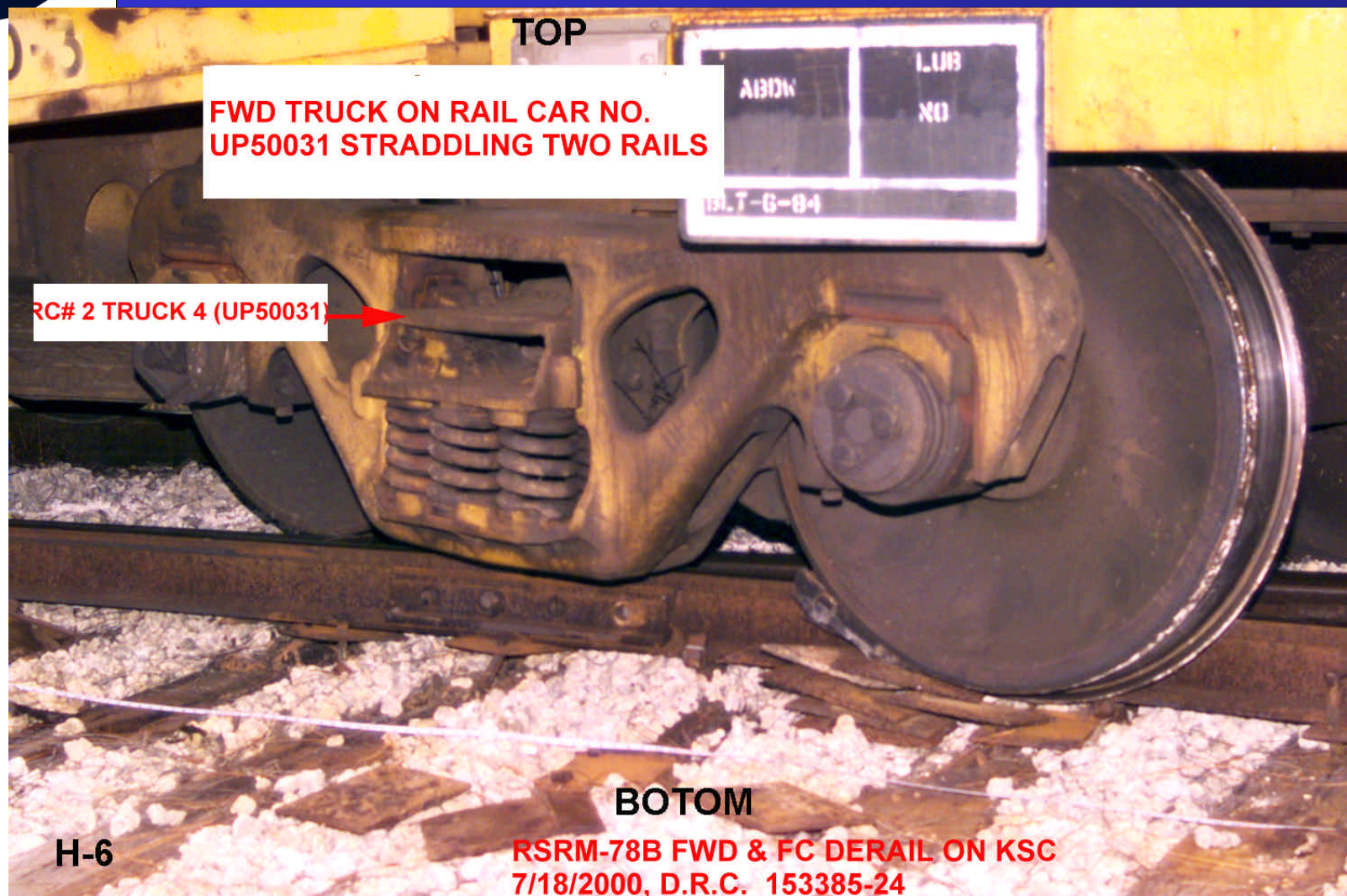


KSC Spaceport Services Safety, Occupational Health, and Environment Division





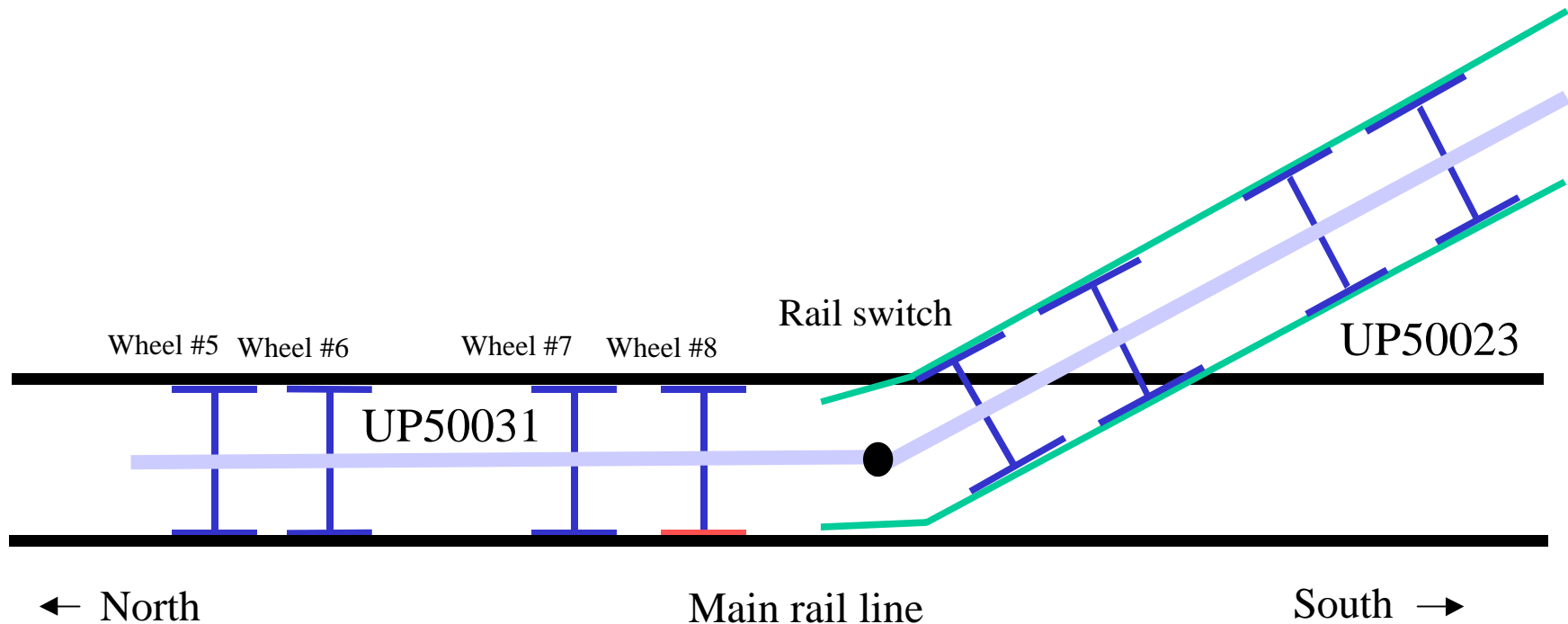
KSC Spaceport Services Safety, Occupational Health, and Environment Division



H-6

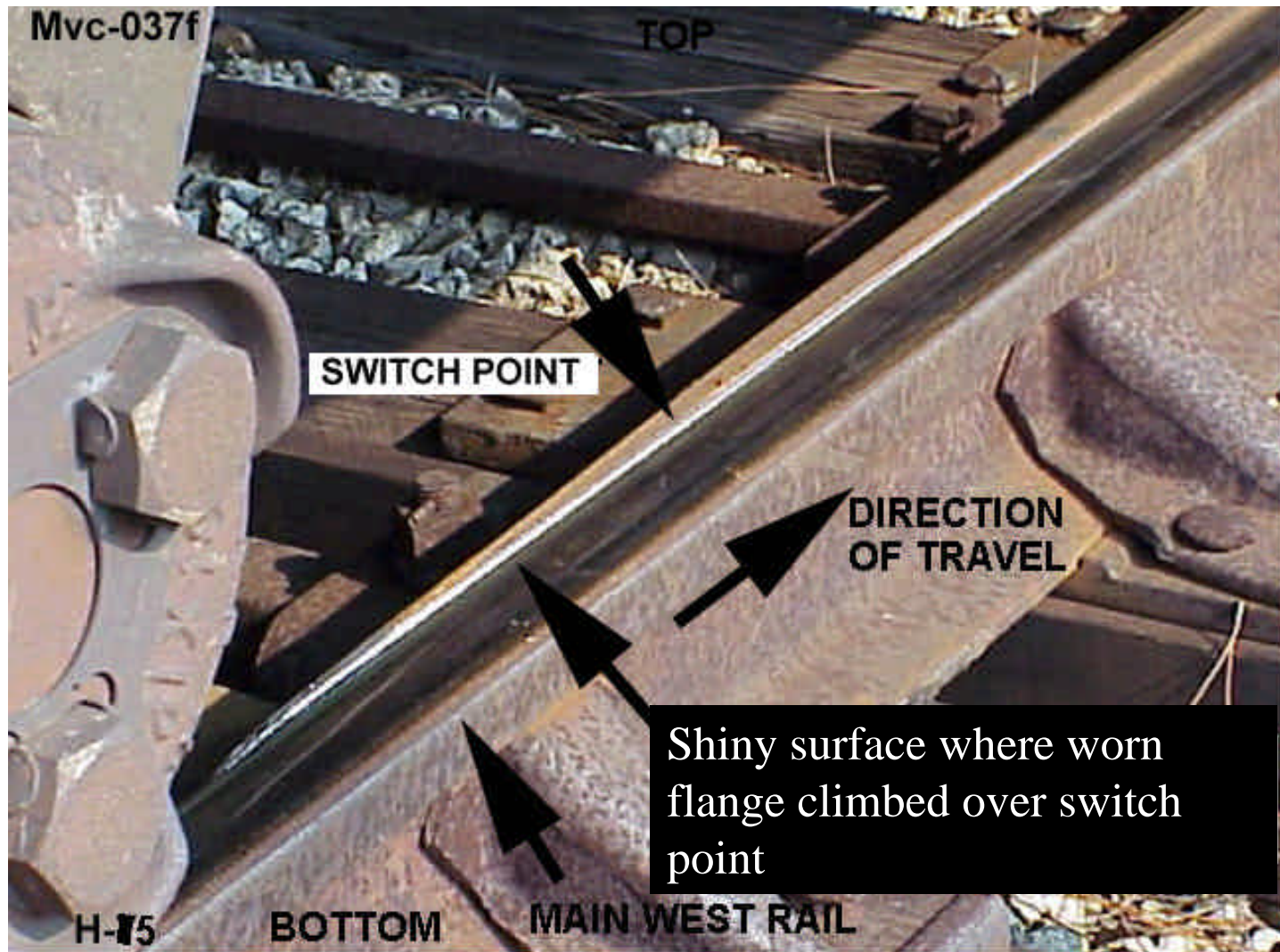
RSRM-78 Incident Discovery of Derailment

First two cars passed through rail switch



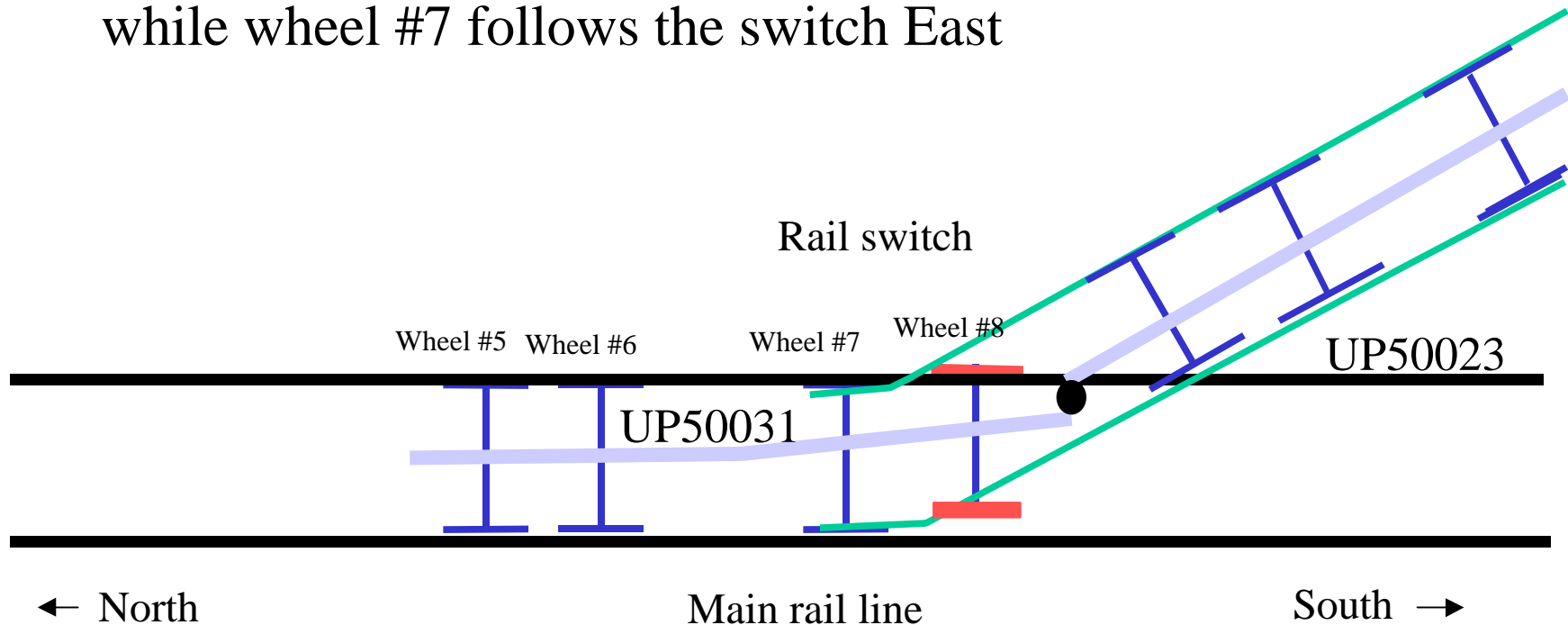
Rail Road siding South of Roberts Road Siding

RSRM-78 Incident Discovery of Derailment



RSRM-78 Incident Discovery of Derailment

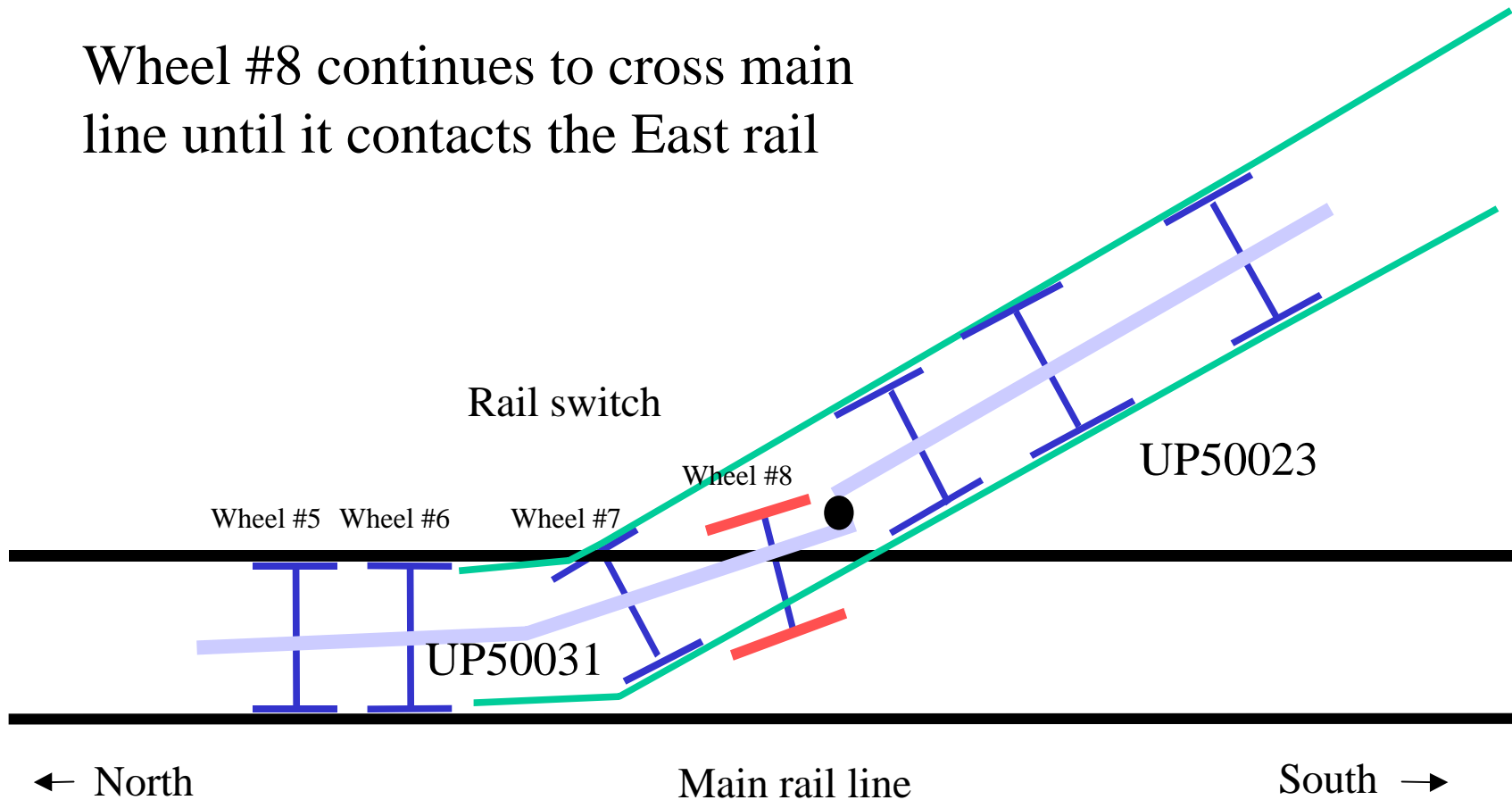
Wheel #8 continues South on main line
while wheel #7 follows the switch East



Rail Road siding South of Roberts Road Siding

RSRM-78 Incident Discovery of Derailment

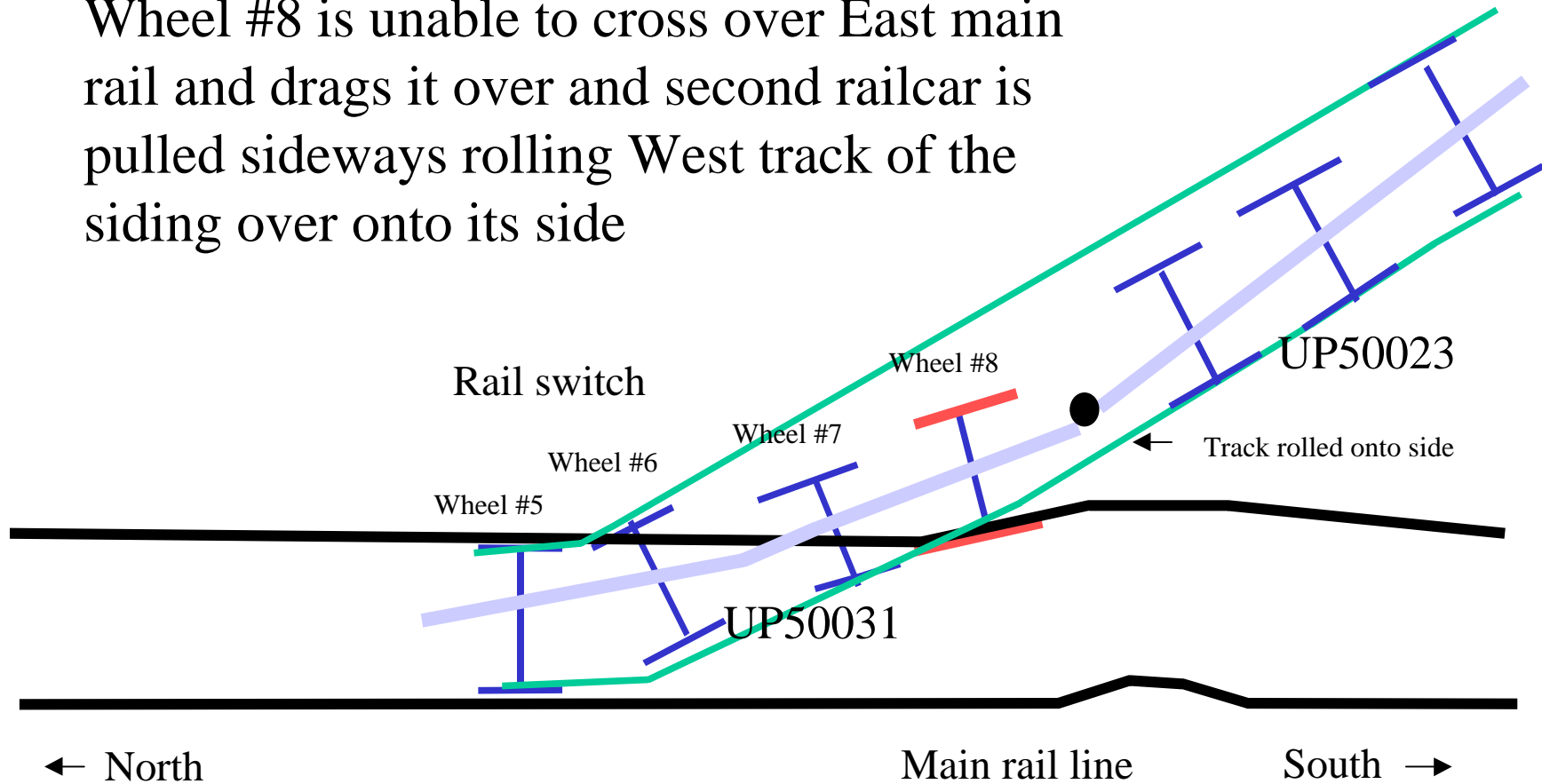
Wheel #8 continues to cross main line until it contacts the East rail



Rail Road siding South of Roberts Road Siding

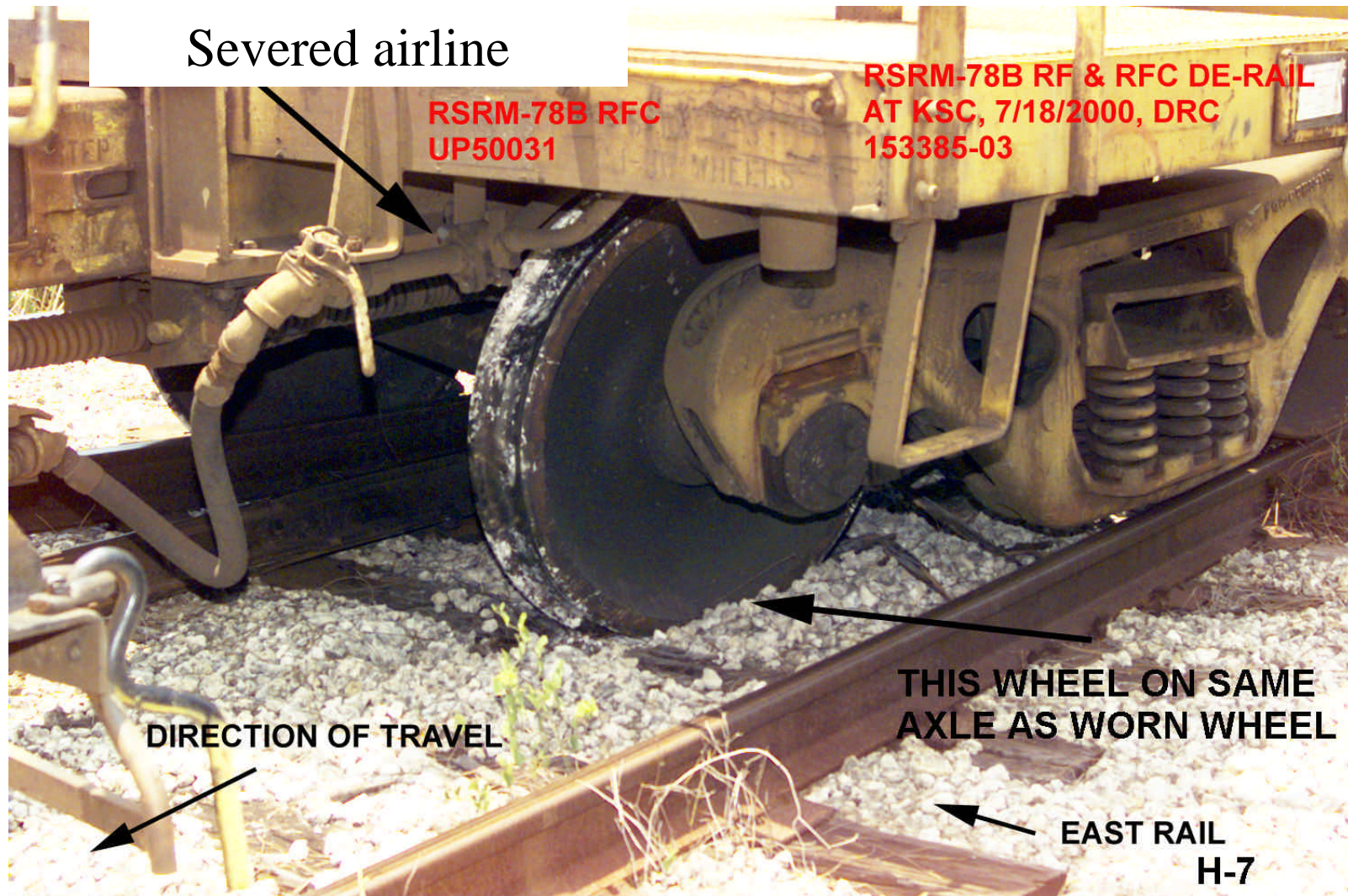
RSRM-78 Incident Discovery of Derailment

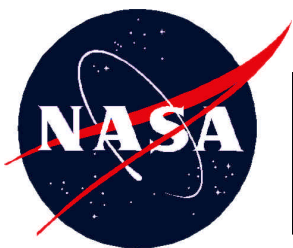
Wheel #8 is unable to cross over East main rail and drags it over and second railcar is pulled sideways rolling West track of the siding over onto its side



Rail Road siding South of Roberts Road Siding

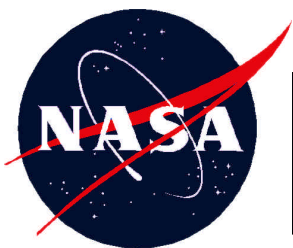
RSRM-78 Incident Discovery of Derailment





KSC Spaceport Services Safety, Occupational Health, and Environment Division



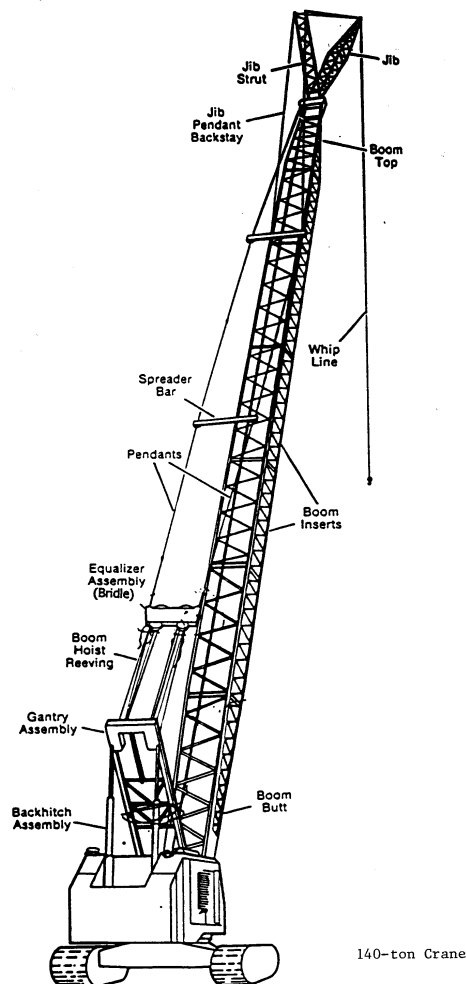


KSC Spaceport Services Safety, Occupational Health, and Environment Division



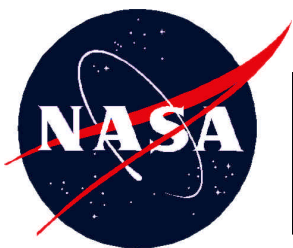
MANITOWOC ENGINEERING CO

A division of The Manitowoc Company, Inc.

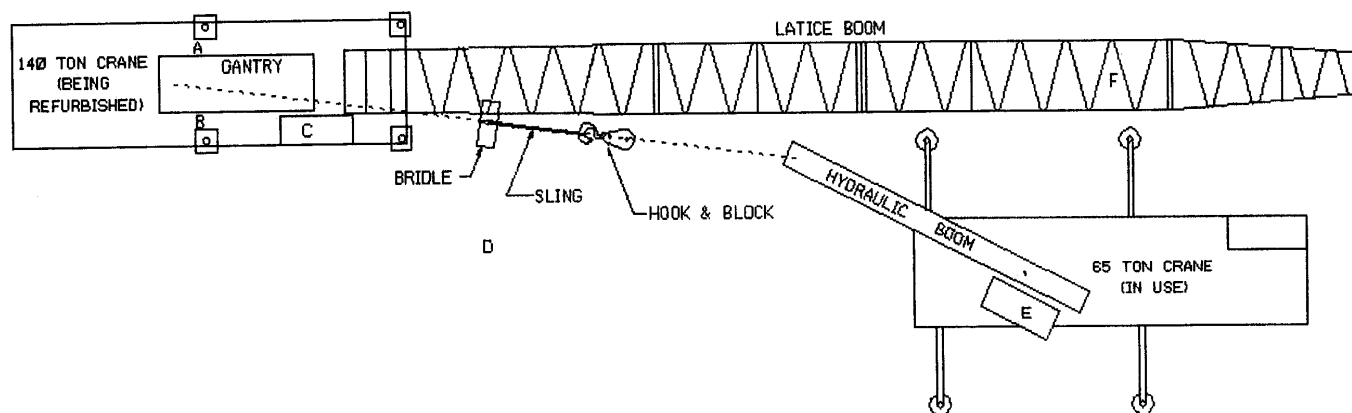


140-ton Crane

FIGURE 1 BOOM COMPONENT IDENTIFICATION
D-1

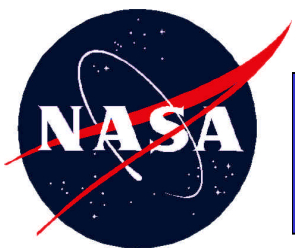


KSC Spaceport Services Safety, Occupational Health, and Environment Division



- A = RINGHAVER MECHANIC
- B = RINGHAVER MECHANIC
- C = SGS CRANE OPERATOR
- D = SGS FLAGMAN
- E = SGS CRANE OPERATOR
- F = RINGHAVER WELDER

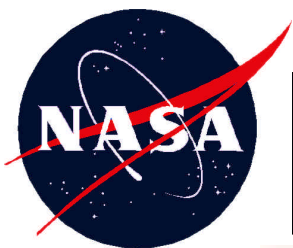
Diagram of Mishap Scene



KSC Spaceport Services Safety, Occupational Health, and Environment Division



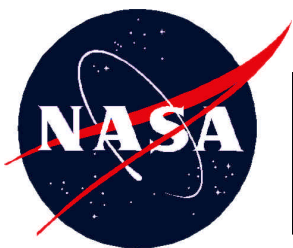
140-ton & 65-ton crane positioning



KSC Spaceport Services Safety, Occupational Health, and Environment Division



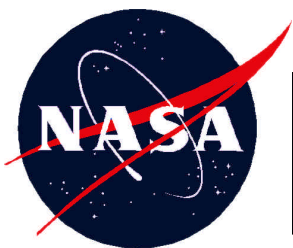
Re-enacted choker sling configuration on bridle



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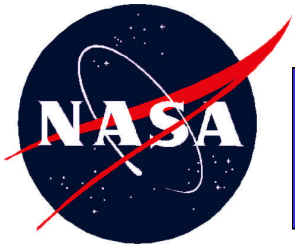
Failure area of sling



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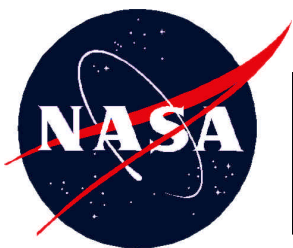


Damaged jib of 65-ton crane



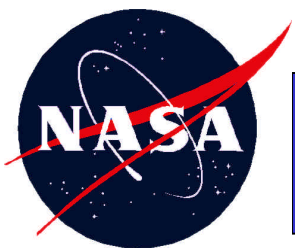
KSC Spaceport Services Safety, Occupational Health, and Environment Division



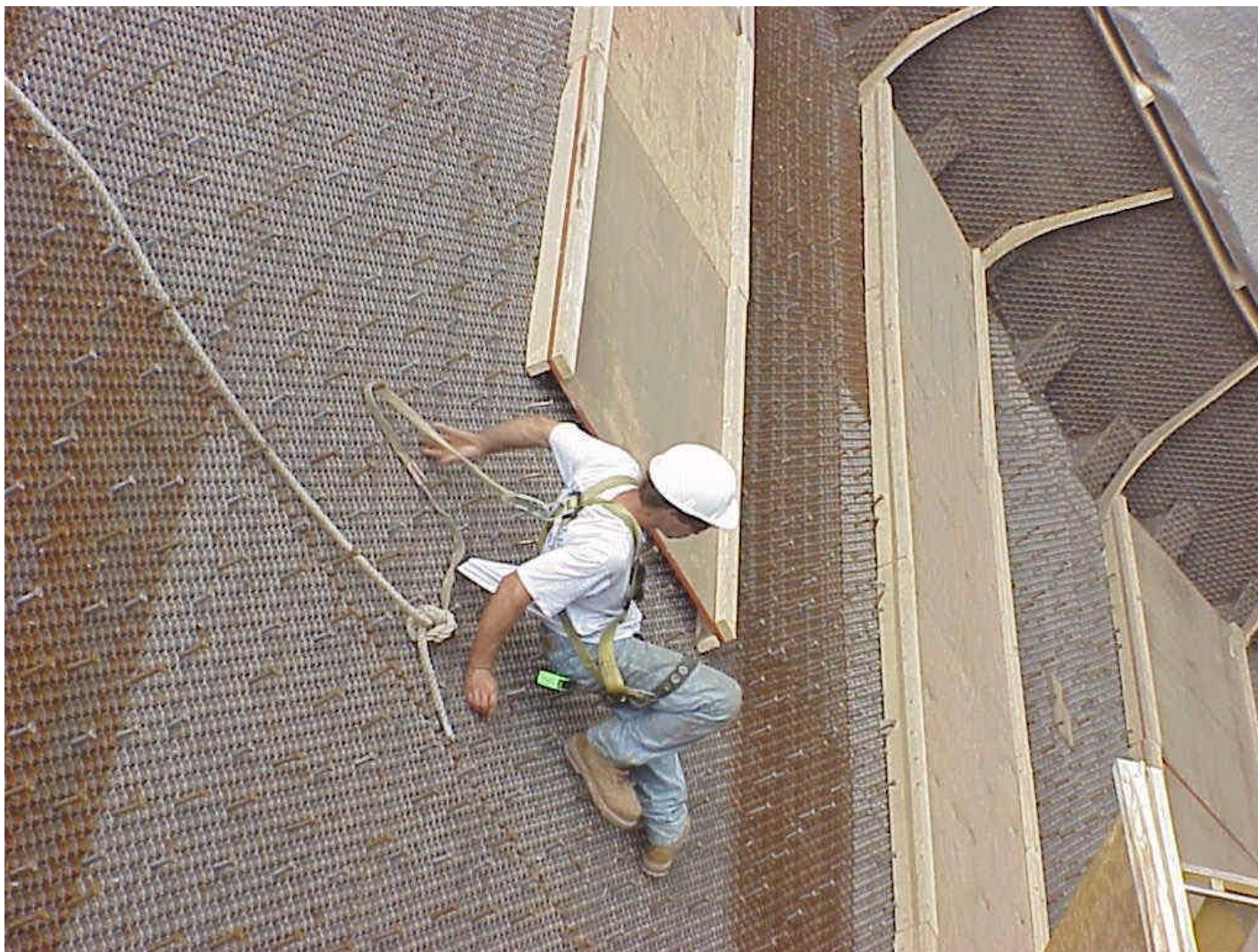


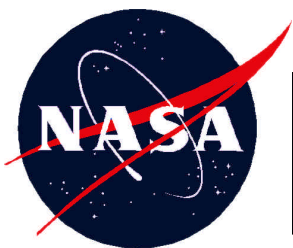
KSC Spaceport Services Safety, Occupational Health, and Environment Division





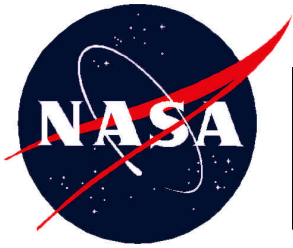
KSC Spaceport Services Safety, Occupational Health, and Environment Division





KSC Spaceport Services Safety, Occupational Health, and Environment Division





KSC Spaceport Services Safety, Occupational Health, and Environment Division

KSC Lost Time Injury Experience

FY 00

5 Lost time injuries

2 slips on tiled hallway (no obstacles)

1 trip over parking lot bumper

1 trip over cardboard box

1 strain (hernia) from moving box of books

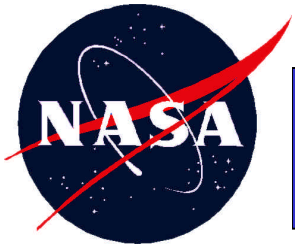
FY 01

3 Lost time injuries

1 paper cut to the eye

1 hip bruise on cafeteria counter

1 slip on tiled hallway (water spill)



KSC Spaceport Services Safety, Occupational Health, and Environment Division

Safety Talks

ON-line source of safety program information has been renewed for all NASA Centers

FY 01 renewal included extending the program to NASA Contractors